REMARKS

Favorable reconsideration of this application is requested in view of the above amendments and the following remarks. The Examiner rejected claims 1-25 under 35 U.S.C. 102(a) as being anticipated by Alft. This rejection is respectfully traversed.

Independent claims 1, 12 and 18

"graphically manipulating...the well bore trajectory...by graphical directional movement of points..."

Applicants have amended the independent claims in order to clarify the disclosed subject matter. Specifically, Applicants have described an improvement over existing well planning tools which set up a wellbore path from a spreadsheet of coordinate values. (Applicants' specification, paragraph 5 and 6.) As stated, such spreadsheet approaches make changes to a well plan a complicated matter, requiring a planner to first discern which values of the spreadsheet need modification and how the adjacent coordinates are effected. Applicants' solution is avoid the need to modify spreadsheet values by providing graphical modification of a wellbore path through graphical manipulation of control points associated with a computer displayed wellbore path.

Alft is similar to prior art bore planning tools that are based on a series or list of values which the planning tool uses to essentially 'connect-the-dots" to form a bore path. (Alft, col. 14:22 – 39.) Alft does not contemplate bore planning or modification by merely manipulating in a graphical environment certain points or portions of a bore path that is displayed on a computer. Instead, Alft describes its process starting with entry of various target locations. The target locations are defined in terms of a 3-D coordinate system, distance, left/right and depth. (Col. 14:25-31.) Other values such as pitch, azimuth and bend radii may also be entered by the bore planner. (Col. 14:31-39 and Figure 7.) Figure 17 illustrates the spreadsheet manner in which the list of targets are entered and complied. Manipulation of the bore path in Alft would consist of modifying the values of the spreadsheet of Figure 17, to allow the system to recalculate the trajectory of the borehole. Thus, although the end result is a bore path that is graphically displayed, see figure 19, Alft does not teach or suggest that the borehole can be constructed or

modified in a graphical environment. In this way, Alft is very similar to the type of existing wellbore planners that Applicants' describe and seek to improve upon.

Furthermore, Applicants' specific mode of graphical manipulation is nowhere suggested in Alft. Specifically, Alft's control points are merely projections calculated by the computer software to guide a trajectory from each target value. The control points in Alft are used to define the second point to make a straight line projection from the last calculated point on the trajectory, allowing Alft's planner to simulate the actual boring process by iteratively recalculating the location of the next control point. (Col. 15:39-63.) Alft does not disclose that these control points can be grabbed and graphically manipulated to effect a graphical change of the wellbore.

Conclusion

For all the reasons advanced above, Applicant respectfully submits that the application is in condition for allowance and that action is earnestly solicited.

The Commissioner is hereby authorized to charge any additional fees that may be required for this amendment, or credit any overpayment, to Deposit Account no. 19-0610. In the event that an extension of time is required, or may be required in addition to that requested in a petition for an extension of time, the Commissioner is requested to grant a petition for that extension of time which is required to make this response timely and is hereby authorized to charge any fee for such an extension of time or credit any overpayment for an extension of time to Deposit Account No. 19-0610.

Respectfully submitted,

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